

**REMARKS/ARGUMENTS**

Reconsideration and allowance of the present application based on the following remarks are respectfully requested.

Withdrawal of the final rejection and favorable reconsideration and allowance of the present application based on the following remarks are respectfully requested.

Upon entry of the above amendments claims 1-4, 6-9, 11, and 13-17 will remain pending.

In order to materially advance prosecution, without raising new issues requiring further consideration or search, the subject matter of claim 5 has been incorporated into independent claim 1 and the subject matter of claim 12 has been incorporated into claim 9.

The rejection of claims 1-9 and 11-17, under 35 U.S.C. 103(a), as unpatentably obvious over Haller et al (US 1,886,480) (Haller) in view of "Flame Retardant Cellulose," Sello et al (Sello), for the reasons of record, is respectfully traversed for at least the following reasons.

As previously discussed, Haller is concerned with dyestuffs for cellulosic residues. The dyestuffs include various nitrogen-containing heterocyclic compounds to which a chromophoric group is attached (see, *e.g.*, page 1, lines 73-81 and page 2, lines 71-90).

There is no disclosure or suggestion of a method for the permanent flameproof finishing of cellulosic fibers or articles containing cellulosic fibers.

Furthermore, in view of the purpose of the treatment of the cellulosic materials to incorporate a dyestuff, there is no disclosure or suggestion that the dyestuff compounds should be used in an amount to provide a nitrogen content, relative to the finished cellulose, of at least 1% or at least 2% by weight, or from 2 or 3 to 7% by weight. The amounts of dyestuff used in the example of Haller would not provide at least 1% by weight of nitrogen relative to the finished cellulose.

Accordingly, it is respectfully submitted that further reliance on Haller in the rejection of the pending claims would necessarily be based on the benefit of the hindsight provided by Applicant's disclosure. This would not be a proper basis for maintaining a rejection for obviousness.

In this regard, it is respectfully submitted that the disclosure of flame retardant cellulose by Sello would not have motivated the practitioner to modify the disclosure of

Haller nor would there have been any expectation of success in achieving the objective of Haller, namely, a dyed cellulosic material.

The rejection makes much of the fact that the chemical backbone structure of cyanuric chloride is the same as the backbone structure of the compounds of Sello. However, it is respectfully submitted that focusing on only the backbone structure to the exclusion of all other teachings of the reference is improper picking and choosing.

Moreover, notwithstanding any such backbone structure similarity, the skilled practitioner would not have been motivated to apply the teachings of Sello to the disclosure of Haller and would not have believed that modifying the cyanuric chloride of Haller to eliminate the halogen atom substituents would have had a reasonable probability of success. Lack of motivation and absence of a reasonable probability of success follows from:

- (i) the different natures of the problems confronting both groups of inventors;
- (ii) the presence of the polymethylol group substitutions on the triazine backbone of Sello ( $R^1$  and  $R^2$  in formulas (I) and (III) include  $\omega$ -hydroxy ( $C_2-C_6$ )alkyl),
- (iii) the absence of any suggestion in either reference to make the modification based on the other;
- (iv) the explicit recognition by Sello (see page 392, right column) that phosphorus-containing triazines prepared from trialkyl phosphites and halotriazines, the type of compounds disclosed by Haller, had limited hydrolytic stability and were of limited interest, and,
- (v) the explicit disclosure at page 399, left column, under "Conclusions" that "the synergistic effect of the nitrogen in the phosphonate substituted triazine compounds is less pronounced than predicted."

Certainly, the passing of approximately forty years between the filing of Haller and the publication of Sello and the further span of thirty years between the publication of Sello and the filing of the present application, is itself strong evidence that the practitioner of ordinary skill in the art at the time the present invention was made did not consider these disparate disclosures to be relevant to each other or suggestive of the presently claimed invention.

Accordingly, for at least the foregoing reasons reconsideration and withdrawal of the rejection of claims 1-9 and 11-17 as unpatentably obvious over Haller in view of Sello is respectfully requested.

Reconsideration and withdrawal of the rejection of 1-9 and 11-17, under 35 U.S.C. 103(a) as obvious over Scheibli in view of Sello is also respectfully requested.

As previously described, the disclosure of Scheibli relates to crosslinking cellulosic fibers to achieve permanent finish effects. This too, is a greatly disparate problem than that which confronted the Sello inventors.

To achieve the totally different objective of imparting permanent finish effects, Scheibli treats the cellulosic fiber with the compounds of formula (1) with an aqueous liquor comprising 1 to 12% by weight, based on the total liquor, of a compound of formula (1), resulting in the fiber material comprising about 1 to 6% by weight of the compounds of formula (1) (see column 14, lines 55-65); or by padding with a treatment bath (especially in the dyebaths together with dyes) containing from 0.01 to 20% by weight of the compounds of formula (1) (see the paragraph bridging columns 15-16). As such, even if the practitioner would be motivated to apply the teachings of Sello (which motivation is not conceded) to the process and products of Scheibli, the result would still not be a method wherein the compound of formula I or II corresponds to a nitrogen content of at least 1 or 2 wt%, relative to the finished cellulose.

In this respect, the Examiner errs in stating that the amounts disclosed at column 14, lines 62-65, and column 16, lines 1-4, fall within applicants' ranges set forth in claim 5. The amount stated in claim 5, now included in claim 1, and the amount stated in claim 12, now included in claim 9, are amounts based on nitrogen and not the weight of the entire compound.

For this reason alone, withdrawal of the rejection relying on Scheibli is respectfully requested.

The examiner has also proposed that "where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." This statement is not seen to apply to the present situation.

Optimizing for the purposes of crosslinking to impart permanent finish effects would not reasonably be expected to lead to the methods or products of the present invention.

With regard to the alleged obviousness of adding phosphorus compounds to the triazine derivatives overlooks that the nearly 30 year old disclosure of the Scheibli patent explicitly discloses that the "synergistic effect of the nitrogen in the phosphonate substituted triazine compounds is less pronounced than predicted." Quite apparently, the practitioner of any level of skill has not seen fit to follow the teachings of Sello in this regard.

In any event, as noted above, the triazine compounds of Sello are polymethylol triazine derivatives. Therefore, while the backbone may be triazine, the substituents on the triazine, which is part of the disclosure as a whole, does not include the substituents which may be present within the scope of the present claims. Therefore, when viewed in the proper perspective, Sello does not disclose anything about the fire retardancy of the compounds of Scheibli other than, assuming such are within the scope of Scheibli, the polymethylolated triazine compounds.


Therefore, for all of the foregoing reasons, withdrawal of the rejection of claims 1-9 and 11-17, as unpatentably obvious over Scheibli in view of Sello is respectfully traversed.

In view of the foregoing, the claims are now believed to be in form for allowance, and such action is hereby solicited. If any point remains in issue which the Examiner feels may be best resolved through a personal or telephone interview, please contact the undersigned at the telephone number listed below.

Should any issues remain unresolved, the Examiner is encouraged to contact the undersigned attorney for Applicants at the telephone number indicated below in order to expeditiously resolve any remaining issues.

Respectfully submitted,

PILLSBURY WINTHROP LLP

By:   
Richard A. Steinberg  
Registration No. 26,588  
Direct No. (703) 905-2039

ARH/RAS  
1600 Tysons Boulevard  
McLean, VA 22102  
(703) 905-2000 Telephone  
(703) 905-2500 Facsimile

Date: February 18, 2004